Total No. of printed pages = 6

3 (Sem 1) CSC M1

2015

COMPUTER SCIENCE

(Major)

Paper : 1.1

(Computer Fundamentals and Programming)

Full Marks – 60

Time – Three hours

The figures in the margin indicate full marks for the questions.

1. Answer the following questions : 1×7=7

(a) Printer is a secondary storage device. (State true or false).

(b) The expression 11%3 evaluates to ..... (Fill in the blank).

(c) Choose the correct option.

The break statement causes an exit

(i) only from the innermost loop

(ii) only from the innermost switch

[Turn over

(iii) from all loops and switches

(iv) from the innermost loop or switch.

(d) Choose the correct output for the following code segment :

```
int main ( )
{  int i = 2, x ;
   x = ++i + ++i;
   printf ("%d", x);
}
```

(i) 4 (ii) 6 (iii) 8 (iv) 7

(e) Choose the correct statement.

(i) Pointers and integers are interchangeable.

(ii) A pointer and an integer may be added or subtracted.

(iii) There is no relationship between pointers and arrays.

(iv) It is not possible to pass a part of an array to a function.

(f) Choose the correct statement.

(i) In the absence of explicit initialization, external and static variables are guaranteed to be intialized to zero.

(ii) It is possible to take the address of a register variable.

(iii) The external static variables are globally accessible.

(iv) For automatic variable, the initializer is restricted to being a constant.

(g) If there is any error in opening a file, the f open ( ) function returns ..... (Fill in the blank)

2. Answer the following questions : 2×4=8

(a) What is bootstrapping ?

(b) Perform $(25)_{10} + (-17)_{10}$ using 2's complement representation.

(c) What is meant by associativity ? What is the associativity of the arithmetic operators ?

(d) Define functions to perform following tasks without using library functions.

(i) Copy a string to another string.

(ii) Concatenate two strings.

(e) Explain the following functions with example.

(i) f open ( )

(ii) f seek ( )